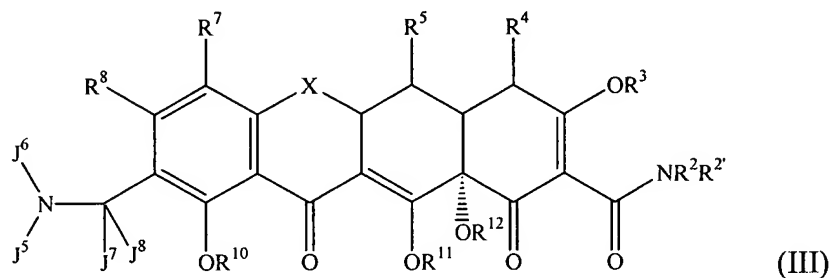


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1.-15. (Cancelled)

16. (Currently Amended) A tetracycline compound of formula (III):



wherein:

J^5 and J^6 are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, sulfonyl, acyl, alkoxycarbonyl, alkaminocarbonyl, alkaminothiocarbonyl, substituted thiocarbonyl, substituted carbonyl, alkoxythiocarbonyl, or linked to form a ring;

J^7 and J^8 are each alkyl, halogen, or hydrogen;

X is $\text{CHC}(\text{R}^{13}\text{Y}^{\prime}\text{Y})$, $\text{CR}^{6'}\text{R}^6$, $\text{C}=\text{CR}^{6'}\text{R}^6$, S , NR^6 , or O ;

R^2 , $\text{R}^{2'}$, $\text{R}^{4'}$, and $\text{R}^{4''}$ are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R^4 is $\text{NR}^{4'}\text{R}^{4''}$, alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen;

$\text{R}^{2'}$, R^3 , R^{10} , R^{11} and R^{12} are each hydrogen or a pro-drug moiety;

R^5 is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R^6 and $\text{R}^{6'}$ are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R^7 is hydrogen, nitro, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, thionitroso, or $-(\text{CH}_2)_0$.
 ${}_3\text{NR}^{7c}\text{C}(=\text{W}')\text{WR}^{7a}$,

W is CR^{7d}R^{7e}, S, NR^{7b} or O;

W' is O, S, or NR^{7f};

R^{7a}, R^{7b}, R^{7c}, R^{7d}, and R^{7e} are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R⁸ is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R¹³ is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; and

~~Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulfhydryl, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl, and pharmaceutically acceptable salts thereof.~~

17. (Original) The tetracycline compound of claim 16, wherein R⁴ is NR^{4'}R^{4''}, X is CR⁶R^{6'}; R², R^{2'}, R⁶, R^{6'}, R⁸, R¹⁰, R¹¹, and R¹² are each hydrogen; R^{4'} and R^{4''} are lower alkyl; and R⁵ is hydroxy or hydrogen.

18. (Original) The tetracycline compound of claim 17, wherein R^{4'} and R^{4''} are each methyl and R⁵ is hydrogen.

19. (Original) The tetracycline compound of claim 16, wherein J⁷ and J⁸ are hydrogen.

20. (Original) The tetracycline compound of claim 16, wherein J⁵ is substituted or unsubstituted alkyl.

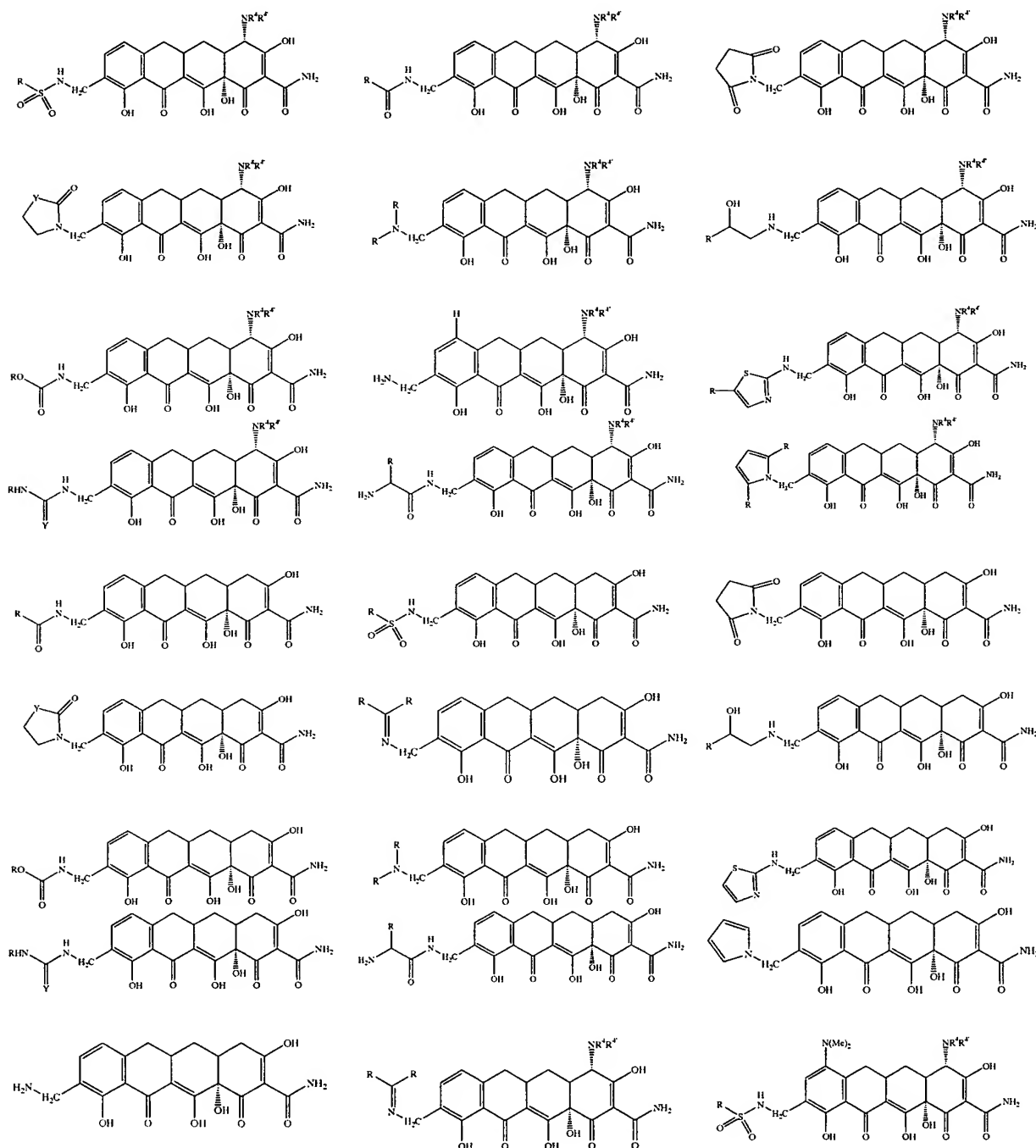
21. (Original) The tetracycline compound of claim 16, wherein J⁵ is sulfonyl.

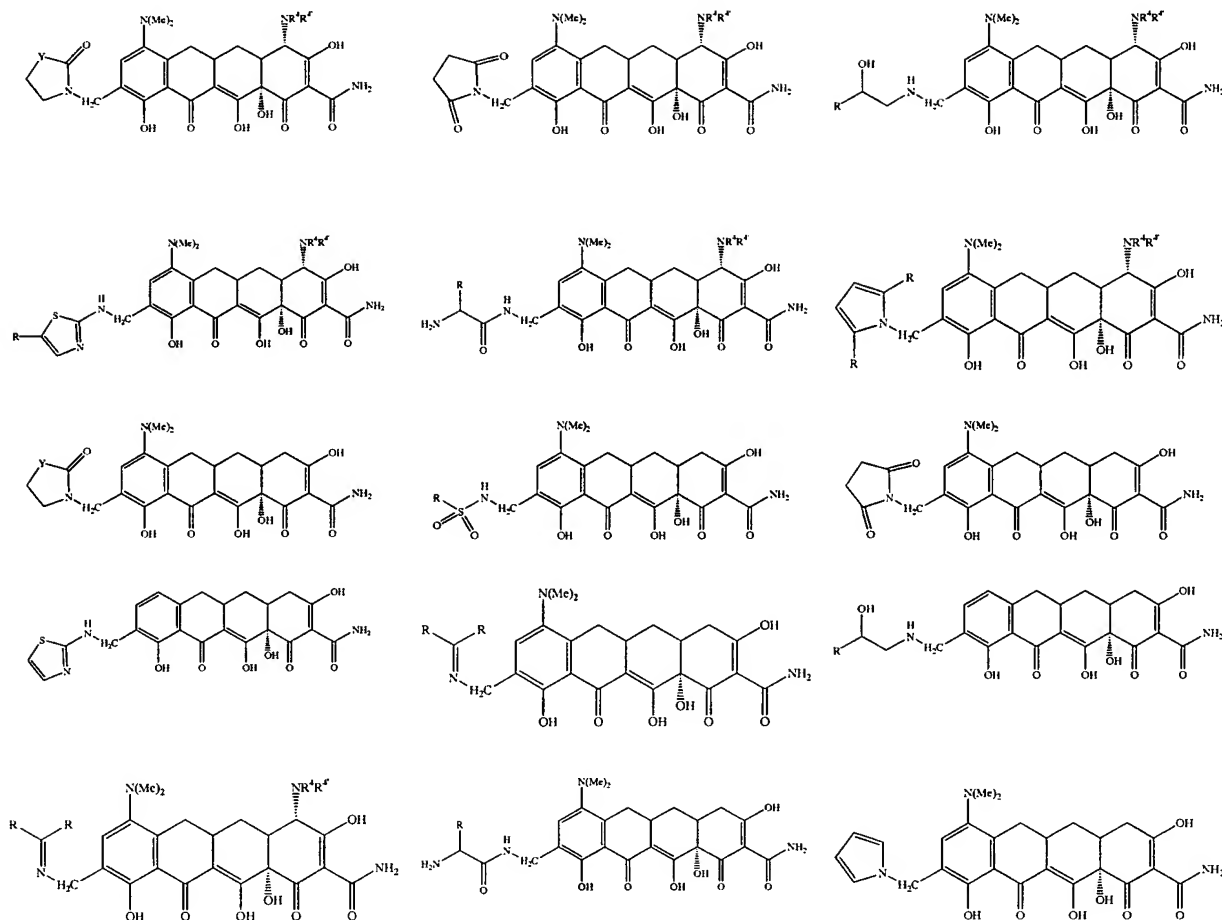
22. (Original) The tetracycline compound of claim 16, wherein J⁵ and J⁶ are linked to form a ring.

23. (Original) The tetracycline compound of claim 16, wherein J⁵ is heteroaryl.

24. (Original) The tetracycline compound of claim 16, wherein J⁵ is substituted carbonyl.

25. (Currently Amended) The tetracycline compound of claim 16, wherein said compound is selected from the group consisting of:

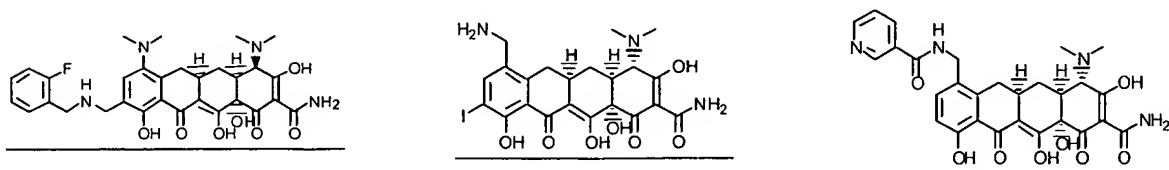


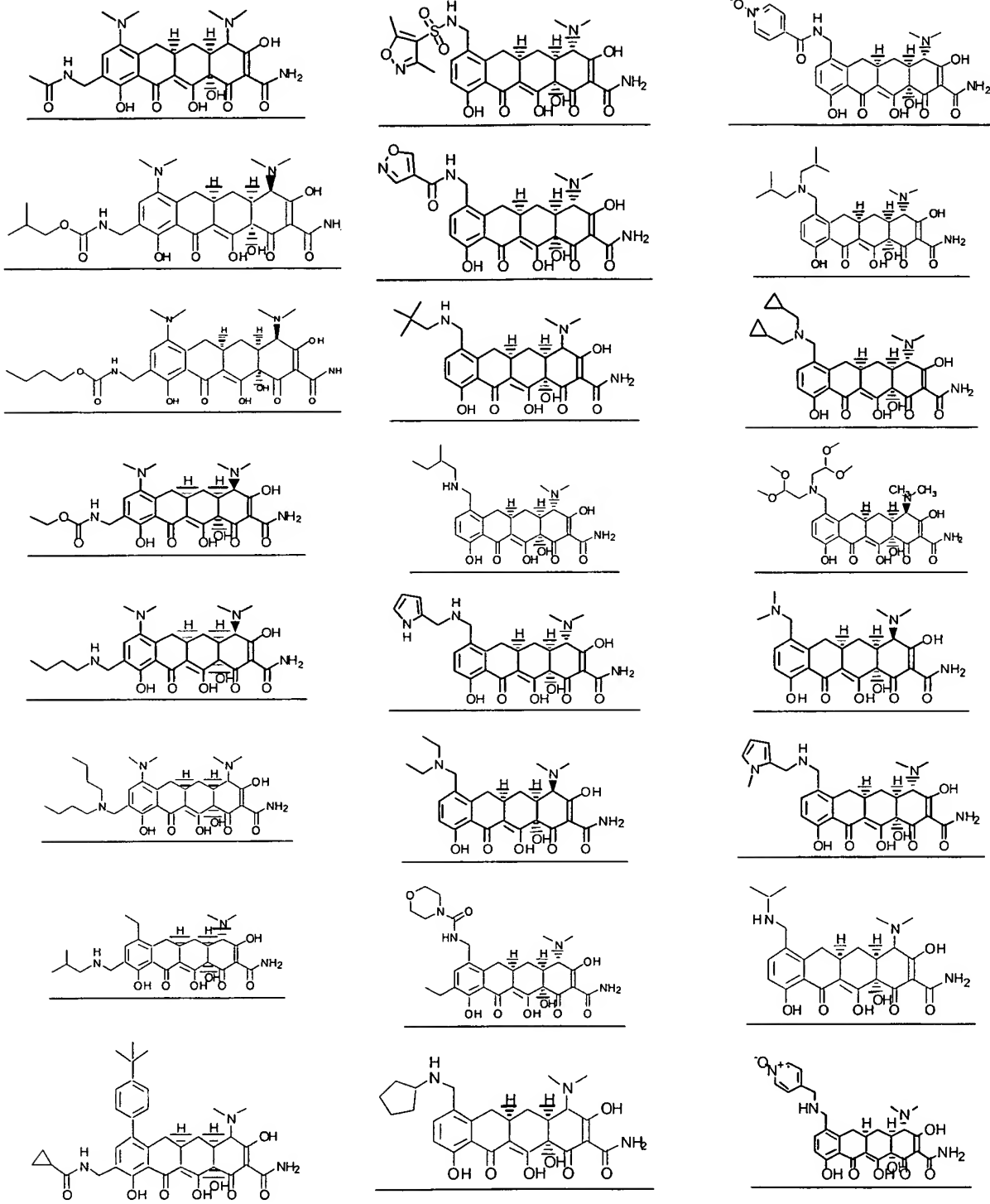


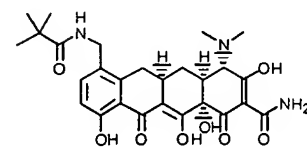
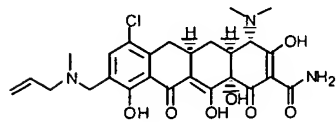
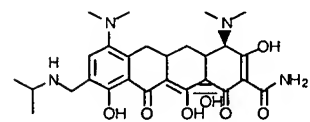
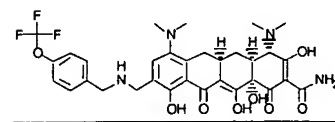
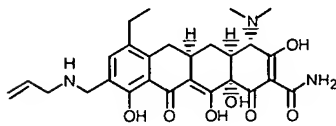
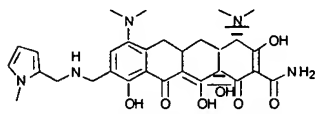
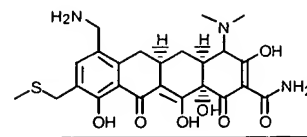
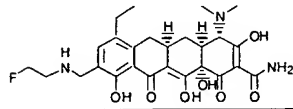
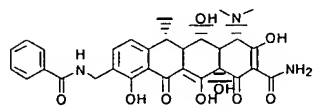
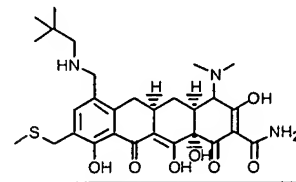
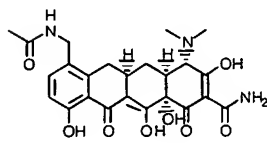
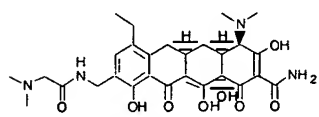
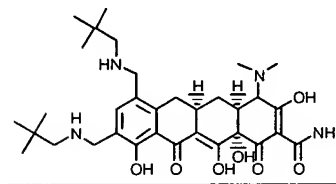
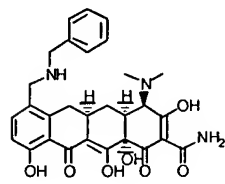
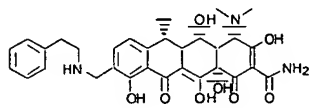
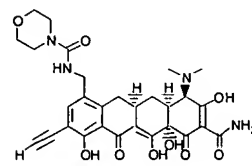
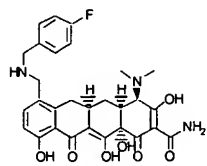
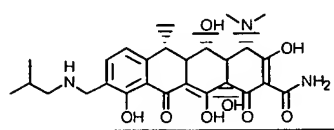
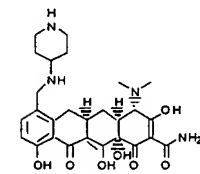
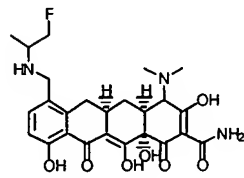
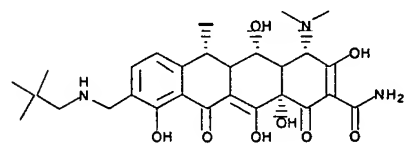
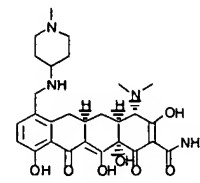
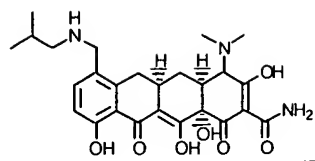
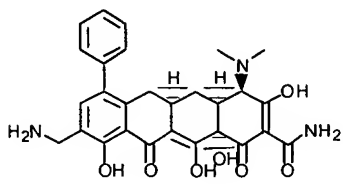
wherein

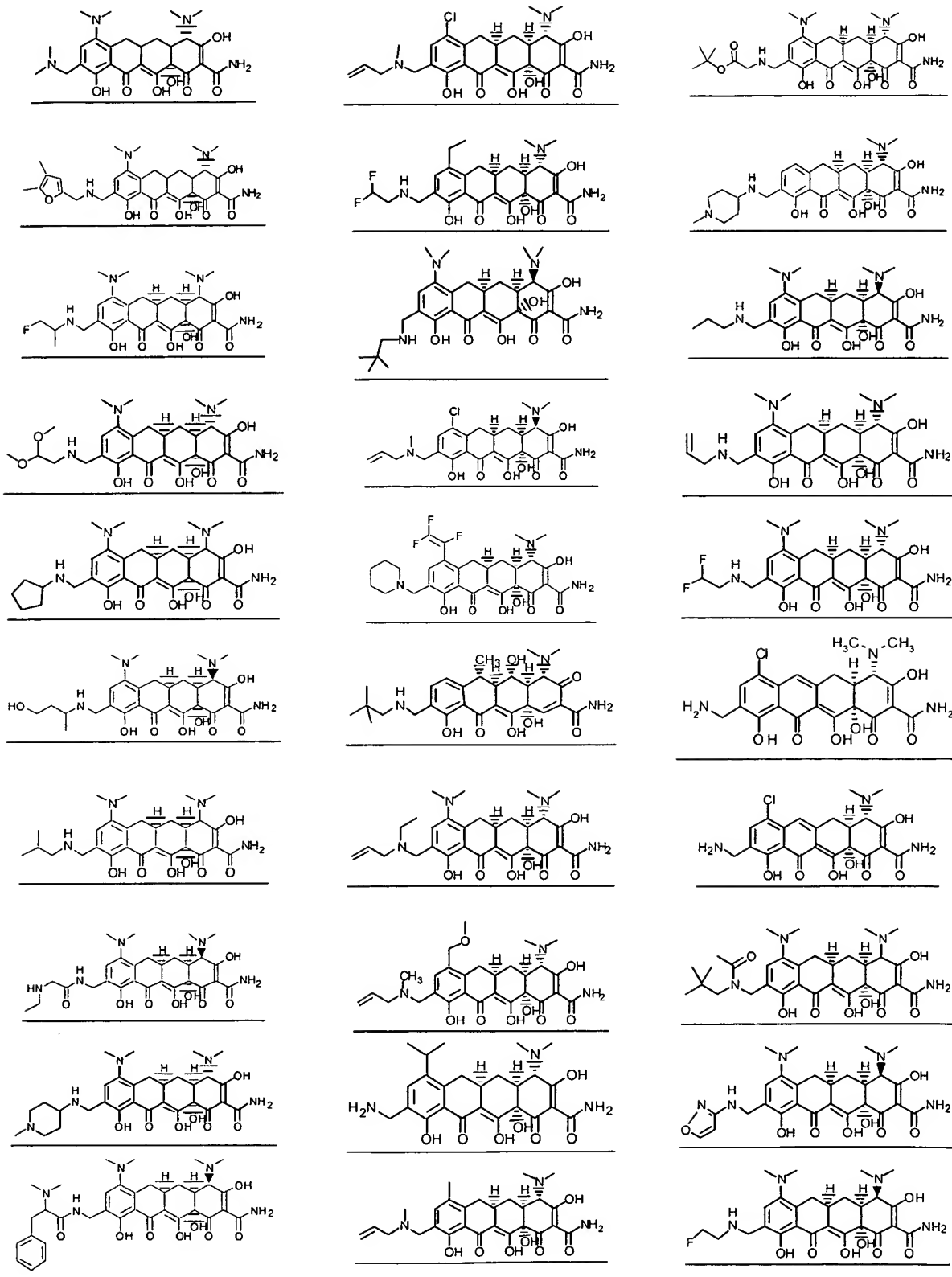
R is substituted or unsubstituted alkyl, alkenyl, alkynyl, halogen, alkoxy; and
Y is N, O, or S, or pharmaceutically acceptable salts or prodrugs thereof.

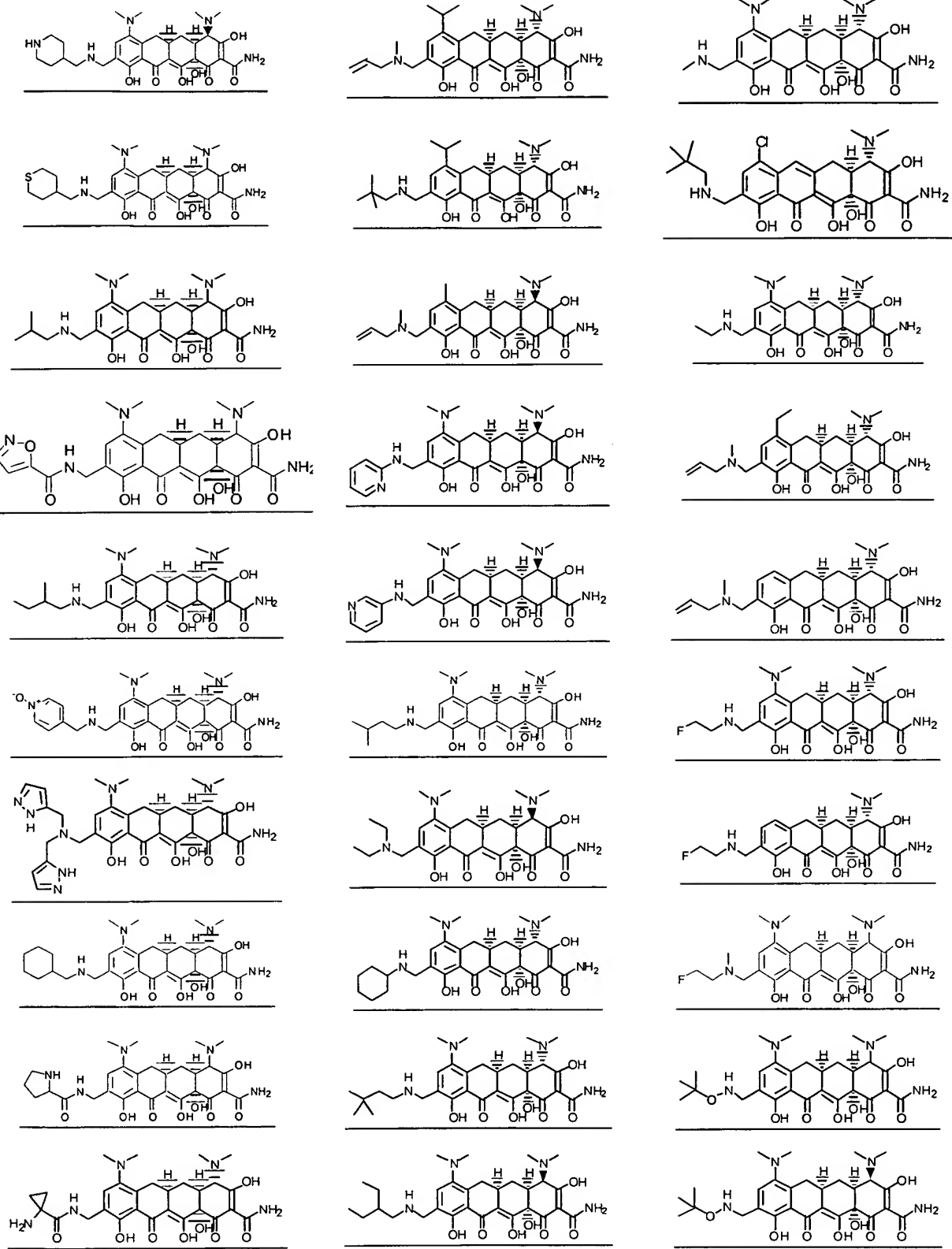
26. (Currently Amended) A tetracycline compound selected from the following: ~~of Table 1,~~

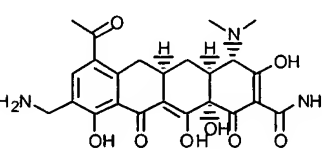
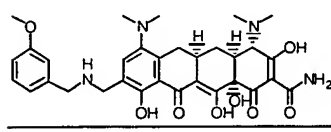
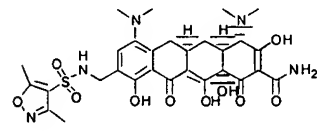
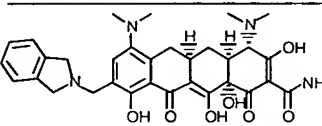
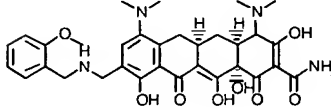
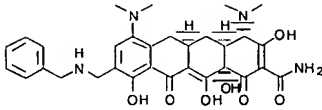
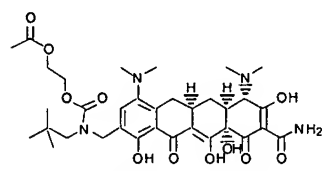
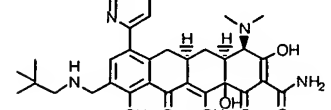
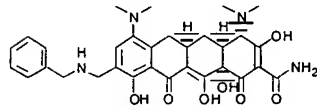
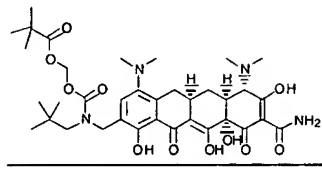
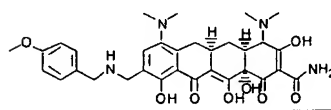
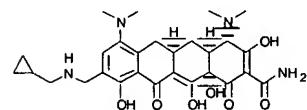
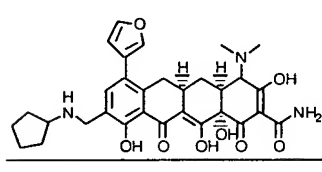
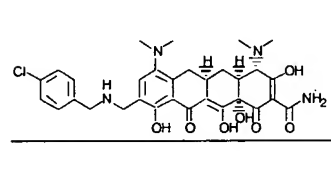
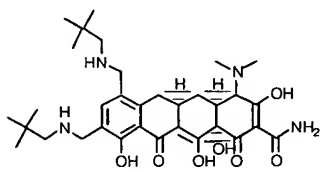
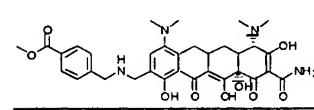
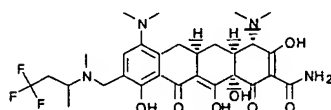
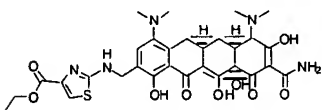
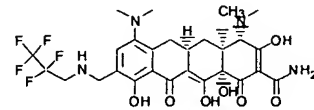
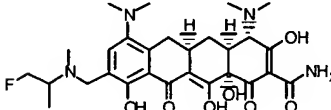
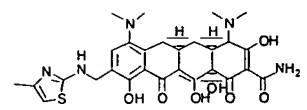
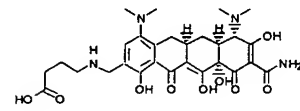
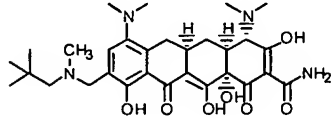
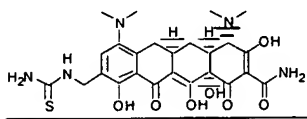
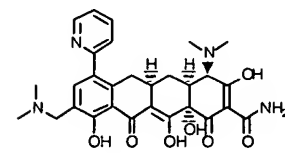
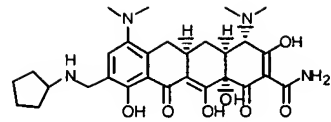
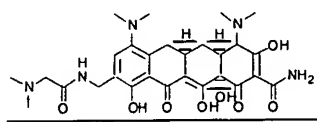




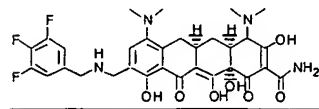
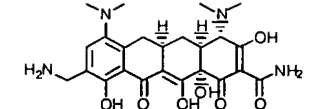
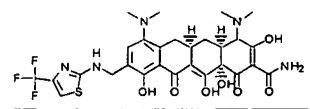
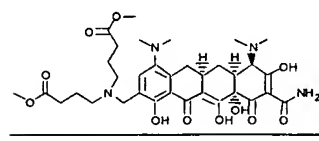
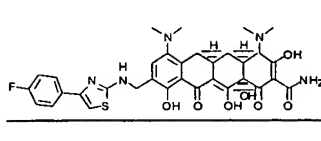
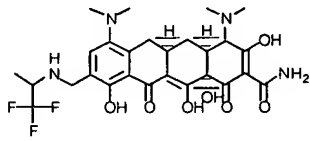
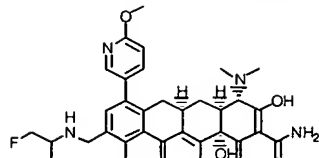
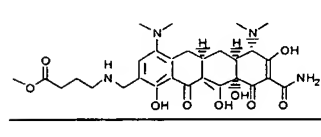
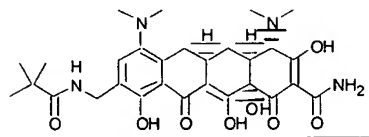
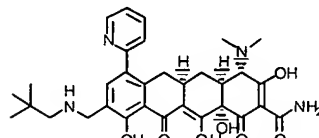
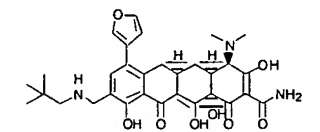
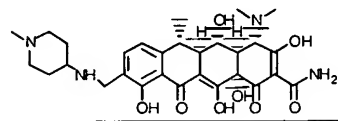
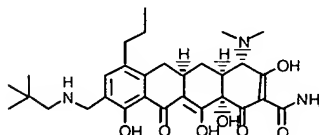
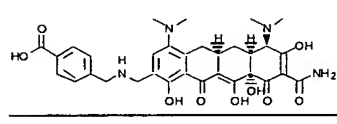
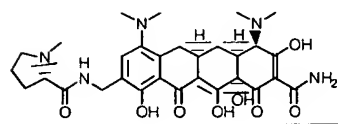
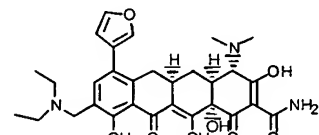
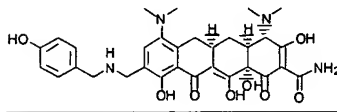
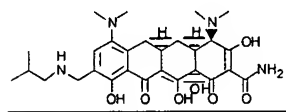
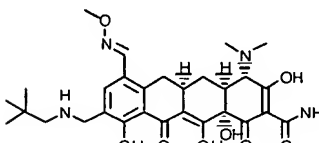
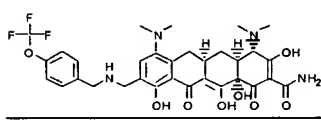
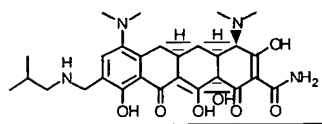
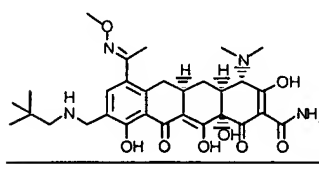
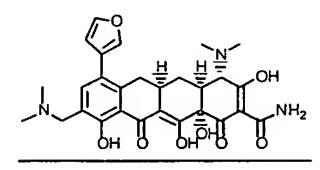
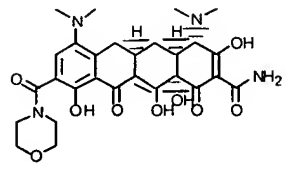
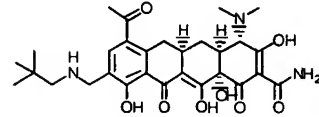
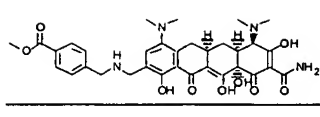
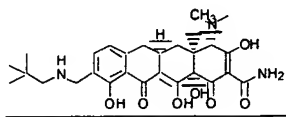


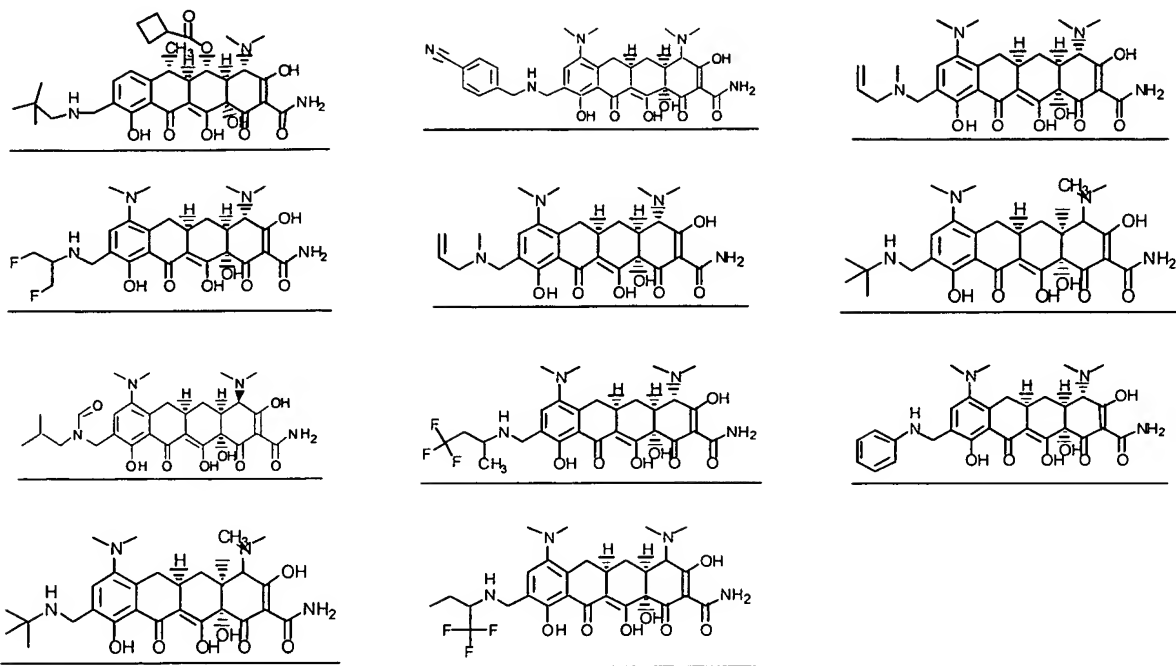






Examiner: C. C. Chang
Art Unit: 1625





or a pharmaceutically acceptable salt thereof.

27. (Currently Amended) A pharmaceutical composition comprising an effective amount of a tetracycline compound of any one of claims 1, 15, 16, 25 or 26, and a pharmaceutically acceptable carrier.

28. (Original) The pharmaceutical composition of claim 27, wherein said effective amount is effective to treat a tetracycline responsive state.

29.-41. (Cancelled)

42. (New) The compound of claim 16, wherein R^7 is dialkylamino.

43. (New) The compound of claim 42, wherein R^7 is dimethylamino.

44. (New) The compound of claim 16 or 24, wherein J^6 is alkyl.

45. (New) The compound of claim 44, wherein said compound is

